MATERIAL WRINKLES

This may be caused by:

A. Improper needle for size of thread, see page 7.
B. Needle thread tension too tight.
C. Bobbin thread tension too tight for material used.
D. Presser foot pressure too great.

MACHINE JAMS OR CLOGS

This may be caused by:

A. Machine not properly threaded.
B. Sewing without material.
C. Sewing with the stitch length regulator knob, (F) Fig. 17, set at No. 0—not allowing the material to move.

MACHINE DOES NOT FEED PROPERLY

A. Make sure stitch length regulator knob, (F) Fig. 17, is not on No. 0.
B. Make sure the drop feed button, (A) Fig. 11, is in raised position.
C. The pressure of the presser foot may be insufficient. Increase the pressure by pushing snap-lock darner, (A) Fig. 12.

MACHINE STOPS WHILE SEWING

Make sure the stop motion knob (Fig. 7) has been tightened sufficiently.

IF THE BOBBIN DOES NOT WIND PROPERLY

This may be caused by:

A. Machine not threaded correctly for winding.
B. Thread jumped out of thread guide discs (D) Fig. 2.
C. Misalignment of thread guide disc. See instructions "Winding the Bobbin," Page 4.

NEEDLE THREAD BREAKS

This may be caused by:

A. Incorrect needle length, see page 6.
B. Needle too fine for thread used, see page 7.
C. Needle bent or needle point broken.
D. Needle inserted incorrectly.
E. Needle not threaded properly.
F. Tension of needle thread too tight.
G. Knots in thread.
H. Stitch hole in needle plate rough or sharp.
I. Poor quality thread.
J. Needle rubbing against attachments or presser foot.
K. Starting machine at full speed.

BOBBIN THREAD BREAKS

This may be caused by:

A. Bobbin case inserted incorrectly.
B. Bobbin thread tension too tight.
C. Bobbin wound unevenly.
D. Bobbin wound too full.
E. Poor quality thread.
F. Stitch hole in needle plate rough or sharp.
G. Bobbin thread not brought up correctly.
H. Incorrect threading of bobbin case.

NOTE: If the bobbin thread cannot be pulled up the needle is probably inserted incorrectly.

NEEDLE BREAKS

This may be caused by the following:

A. Using incorrect length of needle, see page 6.
B. Needle bent (insert new needle).
C. May be using incorrect size needle or thread for material being sewn. See page 7.
D. Presser foot or attachments not securely fastened to presser bar.
E. Pulling material from behind needle while sewing.
(Do not help machine feed material.)

NOTE: **To avoid breaking needles,** be sure that the presser foot or attachments are securely fastened by the thumb screw. Do not sew heavy seams, or very thick goods with too fine a needle. A correspondingly large needle and thread should be used on heavy work. See that the needle is not bent and avoid pulling when stitching. Do not move zigzag stitch width regulator lever with the needle in the material when the machine is not running.

MACHINE SKIPS STITCHES

This may be caused by:

A. Using incorrect length of needle, see page 6.
B. Bent or blunt needle.
C. Needle inserted incorrectly.
D. Needle threaded improperly.
E. Thread too heavy for needle.
F. Pressure of presser foot insufficient, especially when sewing on heavy material.